

ABSTRACT

A totally new method for manufacturing a thin film wherein only an arbitrary small region is structurally controlled. The structure of a film is controlled by applying a force to the entire film or an arbitrary region of the film using a part having a sharp tip during the film-forming process or after finishing the film formation. At this time, the temperature of the film is set at the glass transition point of the amorphous region or higher. An atomic force microscope can be used as an apparatus for realizing this manufacturing method.